

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Steven E. Lenda et al.
Serial Number: 10/738,930
Filing Date: December 17, 2003
Examiner/Art Group Unit: Ula Corinna Ruddock/3612&1771
Confirmation No. 8474
Title: AIR PERMEABLE, WATER REPELLANT
ACOUSTIC WATERSHIELD

DECLARATION OF STEVE LENDA PURSUANT TO 37 C.F.R. 1.132

Mail Stop - Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

I, Steve Lenda, state the following:

1. I am a co-inventor in the above-identified matter and an employee of the assignee of the above-identified application and am qualified to make the following statements.

2. I have reviewed the above-identified application and the operations of the corporation for which I am employed. The invention as claimed in the above-captioned application is currently in production and is being employed in Honda Accura MDX models manufactured in model years 2007 to date. This acoustic watershield has preformed so well that the Honda Motors Corporation has adopted it for use on Honda Pilots for manufacturing years on and after 2009. In fact, Honda has adopted it for use in all vehicles manufactured in North America since 2007 this includes the model designated for launch in model year 2010. It is my belief that this indicates evidence of

the commercial success of the invention as set forth in the claims.

3. Additionally, I reviewed the references discussed in the most recent Office Action in this matter; namely the Tilton and Thompson references' in order to located or prepare materials that met the disclosure in these two references.

4. I obtained a dual density material from Hobbs Bonded Fibers. The material was a lofted fiber pad having a layer composed of lofted polyester fibers having a density of 560 gm/mm^2 with an outer surface composed of a densified region having a fiber density of approximately three times the value of the lofted fiber material. The pad had a thickness of approximately 20 mm and a width of approximately 1 square foot. I inspected this material and found that it had the characteristics and specifications outlined in the Tilton reference.

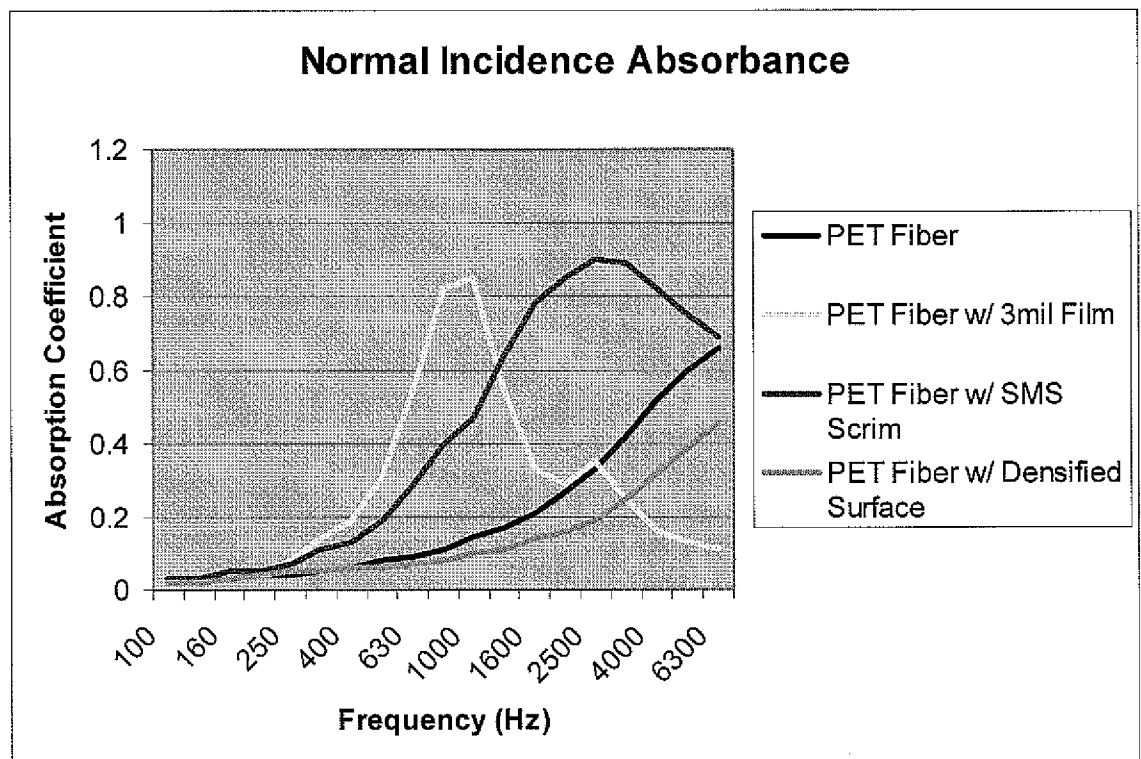
5. I also obtained additional material from Hobbs Bonded Fibers composed of lofted polyester fibers having a density of 560 gm/mm^2 without the densified region. In order to prepare a material having an outer surface according to the disclosure outlined in the Thompson reference, I bonded a layer of 3 mil thick polyethylene to one face of the lofted fiber pad having a thickness of 20 mm and an area of one square foot.

6. In order to simulate water intrusion characteristics encountered in situations such as commercial car washes and to assess the water resistance of the three respective constructs, I placed samples of each material on flat surface and pipetted 10 ml aliquots of aqueous samples onto the outer surface of each respective construct. Each sample was challenged by an aliquot of 10 ml of plain tap water and a sample of 10 ml of tap water admixed with a 5% concentration of commercial carwash detergent. The samples were permitted to stand undisturbed for one hour after which they were inspected to ascertain water permeation. I visually inspected the various samples to determine fluid repellency.

7. The dual density material that corresponded to the material discussed in the Tilton reference had almost instantaneous transmission of the aliquots of tap water and soapy water through the densified outer region to the lofty inwardly oriented region indicating that the material was not fluid repellant.

8. The samples of material prepared according to the disclosure of Thompson and the samples of material prepared according to the present disclosure were also visually inspected. All samples evidenced no significant fluid permeation indicating that the materials were fluid repellant.

9. I evaluated samples of material prepared according to the disclosure of Tilton (PET Fiber with densified surface), samples of material prepared according to the disclosure of Thompson (PET fiber with 3 mil film), samples of PET fiber alone and samples of the material prepared according to the disclosure of the invention as claimed (PET fiber with SMS scrim) for acoustical qualities using the accepted method outlined in ASTM E 1050. The results are shown in the graph reproduced as Fig. 1



10. As can be seen from the graph, the inventive product outperformed the other materials in key ranges between 1600 and 4000 Hz. The inventive sample recorded sound absorption at over 80 % in the target ranges while the dual density material exhibited sound absorbance at less than 40 % and the film material exhibited sound absorbance at less than 35%.

11. The range chosen 1600 to 4000 Hz is the range of noises such as wind. Thus poor performance in such ranges is indicative of materials that would not provide good performance in a vehicle door. Thus the materials outlined in the Tilton and Thompson documents couldn't be used to direct a skilled individual like myself to the present invention.

I, the undersigned, being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. Section 1001, and that such willful false statements may jeopardize the validity of the application or any resulting registration, declares that the facts set forth in this declararion are true; all statements made of my own knowledge are true; and that all statements made on information and belief are believed to be true.

 dated 1 / 11 / 08

Steve Lenda